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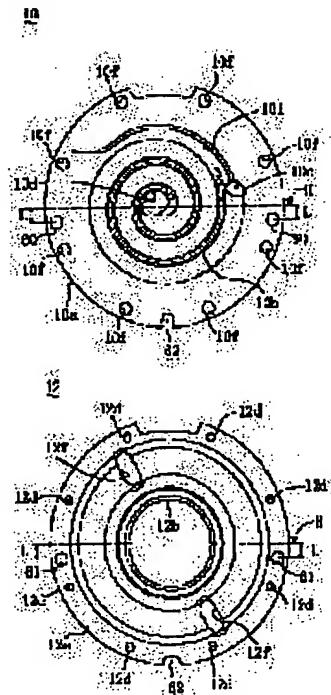
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## (54) SCROLL COMPRESSOR AND ITS MANUFACTURE

**(57)Abstract:**

**PROBLEM TO BE SOLVED:** To reliably prevent erroneous assembly in which a fixed scroll is assembled to a main bearing housing in a state where it is reversed at the angle of 180° when the fixed scroll is positioned, attached and fixed to the main bearing housing through a movable scroll after the main bearing housing for supporting a crank shaft is fixed on the inner peripheral surface of a casing of a scroll compressor.

**SOLUTION:** A pair of positioning pins 60, 60 are provided on the peripheral edge of a contact surface 10a of a fixed scroll 10 to a main bearing housing 12, a pair of pin holes 61, 61 are provided on a contact surface 12e of the main bearing housing 12 to the fixed scroll 10, and the fixed scroll 10 is positioned in the main bearing housing 12 by the engagement of the positioning pins 60 with the pin holes 61. The positioning pins 60, 60 and the pin holes 61, 61 are arranged in the position deviated from the reference flat surface H passing the center line of the fixed scroll 10 or the main bearing housing 12 by the distance L.



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## CLAIMS

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### [Claim(s)]

[Claim 1] Bearing housing which is fixed in sealing casing (1) and the above-mentioned casing (1), and supports a crankshaft (8) pivotable (12), Fixed scrolling fixed to the above-mentioned bearing housing (12) (10). It is arranged between the above-mentioned bearing housing (12) and fixed scrolling (10). And gear so that compression space (16) may be formed in the eddy rolled object (10b) of fixed scrolling (10), and it sets to the scrolling compressor equipped with movable scrolling (11) driven with the above-mentioned crankshaft (8). In either the above-mentioned bearing housing (12) or each contact section of fixed scrolling (10) In and the location which shifted to the same side from the base plane (H) passing through the bearing housing (12) or center line top of fixed scrolling (10) While preparing one pair of engagement sections (60), and (60), on another side of the above-mentioned bearing housing (12) or the contact section of fixed scrolling (10) In and the location which shifted from the above-mentioned base plane (H) to the same side as the above-mentioned engagement section (60) and (60) One pair of engaged portions which engage with the above-mentioned engagement section (60) and (60) (61), The scrolling compressor characterized by constituting so that (61) may be prepared and fixed scrolling (10) may be positioned in bearing housing (12) by engagement to the above-mentioned engagement section (60), (60), an engaged portion (61), and (61).

[Claim 2] Bearing housing which is fixed in sealing casing (1) and the above-mentioned casing (1), and supports a crankshaft (8) pivotable (12), Fixed scrolling fixed to the above-mentioned bearing housing (12) (10). It is arranged between the above-mentioned bearing housing (12) and fixed scrolling (10). And it gears so that compression space (16) may be formed in the eddy rolled object (10b) of fixed scrolling (10). It is the approach of manufacturing the scrolling compressor equipped with movable scrolling (11) driven with the above-mentioned crankshaft (8). Beforehand in either the above-mentioned bearing housing (12) or each contact section of fixed scrolling (10) In and the location which shifted to the same side from the base plane (H) passing through the bearing housing (12) or center line top of fixed scrolling (10) While preparing one pair of engagement sections (60), and (60), on another side of bearing housing (12) or the contact section of fixed scrolling (10) In and the location which shifted from the above-mentioned base plane (H) to the same side as the above-mentioned engagement section (60) and (60) When preparing one pair of engaged portions (61) which engage with the above-mentioned engagement section (60) and (60), and (61) and attaching the above-mentioned fixed scrolling (10) in bearing housing (12) The manufacture approach of the scrolling compressor characterized by positioning fixed scrolling (10) in bearing housing (12) by making an engaged portion (61) and (61) engage with the above-mentioned engagement section (60) and (60).

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**DETAILED DESCRIPTION**

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**[Detailed Description of the Invention]****[0001]**

**[Field of the Invention]** Especially this invention belongs to the technical field of the structure which positions the fixed scrolling in bearing housing, and carries out mounting immobilization, and an approach about a scrolling compressor and its manufacture approach.

**[0002]**

**[Description of the Prior Art]** Conventionally, generally this kind of scrolling compressor is known well, and an end plate is respectively equipped with the scrolling compressor style which consists of the immobilization and movable scrolling which come to protrude in an eddy rolled object in casing, and the eddy rolled object of immobilization and movable scrolling gets into gear mutually so that compression space may be formed among both. Moreover, in casing, the drive motor which drives the above-mentioned movable scrolling through a crankshaft is arranged, and the above-mentioned crankshaft is supported pivotable by bearing housing (engine frame) fixed in casing. furthermore, it is being fixed to the above-mentioned bearing housing by mounting \*\*\*\* casing, and the above-mentioned fixed scrolling makes movable scrolling revolve around the sun through a crankshaft by actuation of a drive motor, and is made as [ compress / by the compression space between the eddy rolled object and the eddy rolled object of fixed scrolling / gas ].

**[0003]** By the way, in case mounting immobilization of the above-mentioned fixed scrolling is carried out at bearing housing in casing, it is necessary to position and attach fixed scrolling to bearing housing from the object of meshing to accuracy movable scrolling and fixed scrolling which are arranged among both. For this reason, as conventionally shown in the Japanese Patent Publication No. No. 15919 [ five to ] official report, while one pair of guide pins are protruded on either a contact side with fixed scrolling of bearing housing (mounting frame), or a contact side with bearing housing of fixed scrolling One pair of guide holes with which the above-mentioned guide pin fits into another side, respectively are formed. In case fixed scrolling is attached to bearing housing, after carrying out fitting of each above-mentioned guide pin to each corresponding guide hole and positioning fixed scrolling in bearing housing, the approach of fixing both is proposed.

**[0004]**

**[Problem(s) to be Solved by the Invention]** Thus, in the structure of positioning fixed scrolling in bearing housing by fitting of one pair of guide pins, and guide holes, one pair of the guide pins (and guide hole) may be prepared on the base plane passing through the bearing housing or center line top of fixed scrolling. In that case, since each guide pin fits into each guide hole also in the state of the reversal in which fixed scrolling carried out 180-degree relative revolution to bearing housing at the circumference of a center line, respectively, there is a possibility that it may be attached after fixed scrolling has carried out [ above-mentioned ] reversal, and that incorrect assembly may occur, and the engine performance of scrolling compressor original cannot be demonstrated by this incorrect assembly, but it is generated in problems, such as inviting lowering of that dependability.

**[0005]** The place which this invention was made in view of this point, and is made into the object

It is performed above. Fixed scrolling with a group in bearing housing it is fixed and in the scrolling compressor manufactured by improving the positioning structure for carrying out mounting immobilization of the fixed scrolling at bearing housing Even if it is going to attach fixed scrolling to bearing housing in the state of reversal accidentally, it can be made not to perform the assembly itself, and it is in preventing incorrect assembly of fixed scrolling certainly.

[0006]

[Means for Solving the Problem] In order to attain the above-mentioned object, in this invention, we decided to arrange the engagement section for positioning formed in bearing housing and fixed scrolling, respectively in the location which shifted to the same side from the base plane passing through the bearing housing or center line top of fixed scrolling.

[0007] As shown in drawing 1 – drawing 4, by invention of claim 1, specifically Sealing casing (1), Bearing housing which is fixed in this casing (1) and supports a crankshaft (8) pivotable (12), Fixed scrolling fixed to this bearing housing (12) (10), It is arranged between the above-mentioned bearing housing (12) and fixed scrolling (10). And the scrolling compressor equipped with movable scrolling (11) which gears so that compression space (16) may be formed in the eddy rolled object (10b) of fixed scrolling (10), and is driven with the above-mentioned crankshaft (8) is a premise.

[0008] And one pair of engagement sections (60) and (60) are prepared in the location which shifted to the same side from the base plane (H) which is either the above-mentioned bearing housing (12) or each contact section of fixed scrolling (10), and passes along the bearing housing (12) or center line top of fixed scrolling (10).

[0009] On the other hand, on another side of bearing housing (12) or the contact section of fixed scrolling (10) In and the location which shifted from the above-mentioned base plane (H) to the same side as the above-mentioned engagement section (60) and (60) One pair of engaged portions (61) which engage with the above-mentioned engagement section (60) and (60), and (61) are prepared, and it constitutes so that fixed scrolling (10) may be positioned in bearing housing (12) by engagement to the above-mentioned engagement section (60), (60), an engaged portion (61), and (61).

[0010] In this invention, when attaching fixed scrolling (10) to bearing housing (12), one pair of engagement sections (60) prepared in one side of both contact section and (60) engage with one pair of engaged portions (61) in the contact section of another side, and (61), respectively, fixed scrolling (10) is positioned by this, and it is attached to bearing housing (12).

[0011] Then the one above-mentioned pair of engagement sections (60), (60) and one pair of engaged portions (61), and (61) Since it is arranged in the location where all shifted to the same side from the base plane (H) passing through the bearing housing (12) or center line top of fixed scrolling (10) If it is attached to bearing housing (12) in the state of normal, without reversing fixed scrolling (10), engagement to the engaged portion (61) of the engagement section (60) and (60) and (61) will be attained as mentioned above.

[0012] However, if fixed scrolling (10) tends to be attached in the state of the reversal which made the mistake in receiving bearing housing (12), and carried out 180-degree relative revolution, since the engagement section (60), (60), an engaged portion (61), and (61) are divided and located in both sides to a base plane (H), engagement to the engagement section (60), (60), an engaged portion (61), and (61) cannot be performed. Therefore, incorrect assembly of fixed scrolling (10) can be known according to the engagement impossible of this engagement section (60), (60) and an engaged portion (61), and (61), and it can be corrected.

[0013] Invention of claim 2 is the approach of manufacturing the scrolling compressor made into the premise of invention of above-mentioned claim 1. By this invention approach Beforehand in either the above-mentioned bearing housing (12) or each contact section of fixed scrolling (10) In and the location which shifted to the same side from the base plane (H) passing through the bearing housing (12) or center line top of fixed scrolling (10) While preparing one pair of engagement sections (60), and (60), on another side of bearing housing (12) or the contact section of fixed scrolling (10) And one pair of engaged portions (61) which engage with the above-mentioned engagement section (60) and (60), and (61) are prepared in the location which shifted from the above-mentioned base plane (H) to the same side as the above-mentioned

engagement section (60) and (60).

[0014] And when attaching the above-mentioned fixed scrolling (10) in bearing housing (12), fixed scrolling (10) is positioned in bearing housing (12) by making an engaged portion (61) and (61) engage with the above-mentioned engagement section (60) and (60). This invention can also do so the same operation effectiveness as invention of claim 1.

[0015]

[Embodiment of the Invention] Drawing 3 and drawing 4 show the high voltage dome mold horizontal scrolling compressor (A) concerning the operation gestalt of this invention. the covering device (1b) of the right and left which this scrolling compressor (A) has sealing casing (1), and this casing (1) is welded to the right-and-left open end of the casing main body (1a) of the shape of a cylinder which consists of a pipe prolonged to a right-and-left horizontal direction, and this casing main body (1a), and blockade that open end in the shape of an airtight -- from -- it becomes (1c).

[0016] the scrolling compressor style (3) which carries out inhalation compression of the refrigerant gas, and carries out the regurgitation to the left flank into casing (1) inside the body (1a) in the above-mentioned casing (1) -- moreover, the drive motor (7) for driving the above-mentioned scrolling compressor style (3) is held in the longitudinal-direction abbreviation center section, respectively. The suction pipe (5) which penetrates this covering device (1b) is connected to the left-hand side covering device (1b) of casing (1), and a low-pressure refrigerant gas is inhaled in the above-mentioned scrolling compressor style (3) with this suction pipe (5).

[0017] Moreover, the discharge tube (6) which penetrates this covering device (1c) is connected to the right-hand side covering device (1c) of casing (1), and the high-pressure refrigerant gas compressed at above-mentioned scrolling compressor guard (3) by this discharge tube (6) is breathed out in the casing (1) exterior of a compressor (A).

[0018] The above-mentioned drive motor (7) comes to have Rota (7b) arranged pivotable in a stator (7a) and this stator (7a). The crankshaft (8) of the core of a casing main body (1a) and this alignment is combined with the core of this Rota (7b) by revolution one.

[0019] The above-mentioned crankshaft (8) is supported by the bearing (21) pivotable near [ that ] the right edge, and mounting immobilization of this bearing (21) is carried out at countershaft carrier housing (20) fixed to the body (1a) inner skin of casing (1). At the right lateral of this countershaft carrier housing (20), mounting immobilization of the pump tie-down plate (26) is carried out, and mounting immobilization of the siphon pump (23) which has the suction pipe (23a) caudad prolonged from a crankshaft (8) is carried out at this pump tie-down plate (26). It is immersed in the lubricating oil to which the suction pipe (23a) of a siphon pump (23) was stored by the oil sump (2) of the casing (1) inner lower part.

[0020] The right edge of the above-mentioned crankshaft (8) so that the above-mentioned countershaft carrier housing (20) may be penetrated and the perimeter of a projection and its projecting part may be covered from the right lateral Mounting immobilization of the sump member (24) to which a center section makes the shape of an abbreviation semi-sphere to the right lateral of the above-mentioned pump tie-down plate (26) is carried out. The lubricating oils of the oil sump (2) pumped up through the above-mentioned siphon pump (23) in the inside, i.e., the space by the side of a crankshaft (8), of the center section of this sump member (24) are once collected. And in the crankshaft (8), the oiling path (8b) which extends in the shaft orientations for supplying the lubricating oil accumulated in the sump member (24) center-section inside in the direction of the above-mentioned scrolling compressor style (3) is formed.

[0021] The above-mentioned scrolling compressor style (3) comes to have left-hand side fixed scrolling (10) and right-hand side movable scrolling (11). The above-mentioned fixed scrolling (10) protrudes an eddy rolled object [ that it is spiral to the right lateral core of a disc-like end plate (10a) (the shape of an involute) ] (10b) on an abbreviation horizontal direction. The bolt insertion hole of plurality (the example of a graphic display eight pieces) which opened and prepared regular intervals in the periphery section of the end plate (10a) at the circumferencial direction (10f), A conclusion bolt (18), (18), and -- are inserted in (10f) and --, respectively, and it is fixed to the left lateral of main bearing housing (12) fixed to the inner skin of a casing main

body (1a) by the spot welding of four points from the outside.

[0022] Inhalation opening (10c) which penetrates this end plate (10a) to a longitudinal direction is prepared in the periphery section of the above-mentioned end plate (10a), and the above-mentioned suction pipe (6) is inserted in this inhalation opening (10c) from that left-hand side.

[0023] Moreover, the delivery (10d) for carrying out the regurgitation of the compressed refrigerant gas to the space on the left-hand side of an end plate (10a) is formed in the core of an end plate (10a). the discharge valve (31) as a check valve which consists of a reed valve opened with the pressure of a refrigerant gas on the left-hand side of this delivery (10d) -- moreover, valve guard (32) which regulates the maximum opening of this discharge valve (31) on the left-hand side of that discharge valve (31) is \*\*\*\*\* (ed) with one bolt (33), respectively.

[0024] On the other hand, the above-mentioned movable scrolling (11) is what protruded the eddy rolled object [ that it is spiral to the left lateral core of a disc-like end plate (11a) with a path smaller than the end plate (10a) of the above-mentioned fixed scrolling (10) (the shape of an involute) ] (11b) on the abbreviation horizontal direction. The eddy rolled object (11b) is supported by the above-mentioned main bearing housing (12) through the Oldham ring (13) so that it may gear as mutually as the eddy rolled object (10b) of the above-mentioned fixed scrolling (10). The Oldham ring (13) infix between this movable scrolling (11) and main bearing housing (12) constitutes the Oldham's coupling which prevents rotation of movable scrolling (11).

[0025] In the above-mentioned main bearing housing (12), from the Oldham ring (13), a ring-like height (12a) is formed in a core side, and the ring-like seal member (35) is prepared inside the height (12a). Moreover, the pin shaft (11c) protrudes on the core of the end plate (11a) right lateral of the above-mentioned movable scrolling (11).

[0026] The apical surface of the eddy rolled object (11b) of the above-mentioned movable scrolling (11) to the end plate (10a) right lateral of fixed scrolling (10) Moreover, the apical surface of the eddy rolled object (10b) of fixed scrolling (10) approaches the end plate (11a) left lateral of movable scrolling (11), respectively. Each wall surface by the side of the inner circumference of the eddy rolled object (11b) of movable scrolling (11), and a periphery It is close to each wall surface by the side of the periphery of the eddy rolled object (10b) of fixed scrolling (10), and inner circumference by two or more places, respectively, and partition formation of the compression space (16) for compressing a refrigerant gas between each [ these ] contact section is carried out.

[0027] A bearing hole (12b) is formed in the core of the above-mentioned main bearing housing (12), and bearing (37) is prepared in this bearing hole (12b). And insertion support of the left end section of a crankshaft (8) is carried out pivotable at the bearing (37) in the bearing hole (12b) in the above-mentioned main bearing housing (12), and the eccentric hole (8a) which carried out eccentricity to the axial center of this crankshaft (8) is formed in the left end side. Fitting of the pin shaft (11c) of the above-mentioned movable scrolling (11) is carried out to this eccentric hole (8a) through bearing (38), and actuation connection of the crankshaft (8) is carried out by this at movable scrolling (11). Therefore, with the above-mentioned Oldham's coupling, without rotating with a revolution of a crankshaft (8), movable scrolling (11) revolves around the sun to the axial center of a crankshaft (8), and contracts the above-mentioned compression space (16).

[0028] As shown in drawing 1, the oil injection slot (10i) for supplying a lubricating oil in compression space (16) by the pressure differential of the periphery section and compression space (16) from the end plate (10a) of both scrolling (10) and (11) and the periphery (11a) section is established in the end plate (10a) right lateral of the above-mentioned fixed scrolling (10).

[0029] The place by which it is characterized [ of this invention ] is in the structure of positioning and attaching the above-mentioned fixed scrolling (10) in main bearing housing (12). In namely, the location which countered in a contact side (10h) with main bearing housing (12) in the right lateral periphery section of fixed scrolling (10) horizontally [ as shown in drawing 1 ] The gage pin (60) as one pair of engagement sections and (60) protrude, and both this gage pin (60) and (60) are arranged in the location where only the offset dimension (L) shifted to the

same bottom from the base plane (H) passing through the center line top of fixed scrolling (10). [0030] On the other hand, as shown in drawing 2, in a contact side (12e) with fixed scrolling (10) in the left lateral periphery section of main bearing housing (12) The pin hole as one pair of engaged portions which consist of breakthroughs which engage with the location which countered horizontally similarly the above-mentioned gage pin (60) and (60) (61), (61) is formed and both this pin hole (61) and (61) are prepared in the location where only the offset dimension (L) same to the same down side from the base plane (H) passing through the center line top of main bearing housing (12) as the above-mentioned gage pin (60) and (60) shifted.

[0031] And fixed scrolling (10) is positioned in main bearing housing (12) by making the locator pin (60) of fixed scrolling (10), and (60) insert and engage with the pin hole (61) of main bearing housing (12), and (61), respectively at the time of with [ to main bearing housing (12) of the above-mentioned fixed scrolling (10) ] a group.

[0032] In addition, as shown in drawing 3 and drawing 4, the step (10g) of the predetermined depth which cuts, and lacks and becomes is formed in the periphery section of the left lateral (outside surface) of the above-mentioned fixed scrolling (10) so that a clearance may be opened between casing main body (1a) inner skin, and penetration formation of each above-mentioned bolt insertion hole (10f) is carried out on the base of the step (10g).

[0033] As shown in drawing 2 and drawing 3, in the periphery section of main bearing housing (12) Moreover, the bolt screwing hole of plurality (the example of a graphic display eight pieces) (12d), Corresponding to the bolt insertion hole (10f) of the above-mentioned fixed scrolling (10), penetration formation of (12d) and — is carried out. Mounting immobilization of the fixed scrolling (10) is carried out to main bearing housing (12) with the conclusion bolt (18) which inserts in each above-mentioned bolt insertion hole (10f), and is screwed in a bolt screwing hole (12d).

[0034] Moreover, (62) is the oil return path formed between each Shimo edge of fixed scrolling (10) and main bearing housing (12), and casing main body (1a) inner skin among drawing 1 – drawing 4. (12f) is the guide slot of the above-mentioned Oldham ring (13) among drawing 2 and drawing 3.

[0035] Therefore, in the above-mentioned operation gestalt, if a power source is connected to a scrolling compressor (A), a drive motor (7) will operate, Rota (7b) and a crankshaft (8) will rotate in one to the circumference of the axial center, and an eccentric hole (8a) will revolve around the sun to the axial center of the above-mentioned crankshaft (8). In connection with this, movable scrolling (11) revolves around the sun to fixed scrolling (10). At this time, while the eddy rolled object (10b) of each scrolling (10) and (11) and the compression space (16) divided by (11b) move toward a core, it contracts. A low-pressure refrigerant gas is inhaled by compression space (16) from a suction pipe (5) and inhalation opening (10c) of fixed scrolling (10), a refrigerant gas is compressed by actuation of these single strings by this compression space (16), and the refrigerant gas made into high voltage is breathed out in the space on the left-hand side of fixed scrolling (10) through the delivery (10d) and discharge valve (31) of fixed scrolling (10).

[0036] And for explaining the manufacture approach of the above-mentioned scrolling compressor (A), first, while thermal insert carrying out of the stator (7a) of a motor (7) into the body (1a) of casing, apart from this, a crankshaft (8) is thermal insert made Rota (7b) of a motor (7), and it fixes in it. Subsequently, while carrying out fit-in arrangement of the Lord and countershaft carrier housing (12), and (20) into a casing main body (1a) The above-mentioned Lord and countershaft carrier housing (12) after putting in Rota (7b) of the above-mentioned motor (7) in the state of an alignment, Spot welding (the inside of drawing and (W) are the weld zone) of (20) is carried out from the outside of a casing main body (1a) by the multipoint (main bearing housing (12) four points and countershaft carrier housing (20) three points) of a circumferencial direction, and it fixes.

[0037] After immobilization of this Lord and countershaft carrier housing (12), and (20), to main bearing housing (12), a seal member (35) etc. is attached, and after putting in the Oldham ring (13), movable scrolling (11) is attached. Furthermore, fixed scrolling (10) is positioned and arranged from on this movable scrolling (11).

[0038] When attaching the above-mentioned fixed scrolling (10) to main bearing housing (12), One pair of gage pins in the right lateral (contact side with main bearing housing (12) (10h)) of fixed scrolling (10) (60), (60), respectively. One pair of pin holes of the left lateral (contact side with fixed scrolling (10) (12e)) of main bearing housing (12) (61), It is inserted in (61) and engaged, and fixed scrolling (10) is positioned by this in the location of normal, and it is attached to main bearing housing (12).

[0039] And the both sides of the one above-mentioned pair of gage pins (60), (60) and one pair of pin holes (61), and (61) Since it is prepared in the location where only the offset dimension (L) same from the base plane (H) passing through the center line top of fixed scrolling (10) or main bearing housing (12) as the same bottom shifted, When it is attached to main bearing housing (12) in the state of normal, without carrying out vertical reversal of the fixed scrolling (10), one pair of gage pins (60) and (60) engage with a pin hole (61) and (61) smoothly as mentioned above, respectively.

[0040] However, if fixed scrolling (10) makes a mistake in receiving main bearing housing (12) by an operator's etc. activity mistake and it is going to be attached in the state of the vertical reversal which carried out 180-degree relative revolution The gage pin (60) of fixed scrolling (10) and (60) move to a base plane (H) upside. It stops corresponding with the pin hole (61) of main bearing housing (12) located in the base plane (H) bottom, and (61), and the gage pin (60) and (60) cannot be inserted in a pin hole (61) and (61), and it cannot be engaged. What is necessary is for an operator etc. to be able to know incorrect assembly of fixed scrolling (10) by that, and just to do after that the correction activity which changes fixed scrolling (10) into the location of normal, if there is insertion engagement disabling of the pin hole (61) of such a gage pin (60) and (60) and (61). Therefore, incorrect assembly of fixed scrolling (10) can be prevented certainly, and the dependability of a scrolling compressor (A) can be raised.

[0041] In addition, in the state of positioning of this fixed scrolling (10), the left lateral of fixed scrolling (10) carries out abbreviation coincidence with the left-hand side open end of a casing main body (1a). Moreover, each bolt insertion hole (10f) of fixed scrolling (10) and the bolt screwing hole (12d) of main bearing housing (12) are in agreement.

[0042] Then, mounting immobilization of the fixed scrolling (10) is carried out at main bearing housing (12) by inserting a conclusion bolt (18) in each bolt insertion hole (10f) of fixed scrolling (10), and carrying out screwing conclusion of the thread part at the bolt screwing hole (12d) of main bearing housing (12).

[0043] Thus, what is necessary is to attach an oil pump (23), to weld a covering device (1a) and (1b) to the right-and-left open end of a casing main body (1a), respectively, and just to close the open end in the shape of an airtight, after carrying out mounting immobilization of the fixed scrolling (10) at main bearing housing (12).

[0044] In addition, although a locator pin (60) and (60) are prepared in fixed scrolling (10) and a pin hole (61) and (61) are prepared in main bearing housing (12) with the above-mentioned operation gestalt, respectively In main bearing housing (12), on the contrary, both gage pins (60) and (60) Moreover, both the pin hole (61) and (61) may be prepared in fixed scrolling (10), respectively. one [ further ] locator pin (60) in main bearing housing (12) (one pin hole (61) -- fixed scrolling (10)) moreover, the gage pin (60) of another side can also be prepared in fixed scrolling (10), respectively (the pin hole (61) of another side -- main bearing housing (12)).

Moreover, not to be the engagement structure of a pin (60) and a pin hole (61), but what is necessary is just the engagement structure of the engagement section and an engaged portion.

[0045] Moreover, although the above-mentioned operation gestalt is the case of a high voltage dome mold horizontal scrolling compressor (A), it cannot be overemphasized that this invention is applicable to other scrolling compressors of the double-edged sword type with which the eddy rolled object protruded on a longitudinal setting type or end plate both sides of movable scrolling.

[0046]

[Effect of the Invention] As explained above, according to claim 1 or invention of 2, to the casing inner skin of a scrolling compressor Fix bearing housing which supports a crankshaft and this bearing housing is received. Make movable scrolling intervene, carry out positioning arrangement

of the fixed scrolling, and when carrying out mounting immobilization In either the above-mentioned bearing housing or the contact section of fixed scrolling, one pair of engagement sections Moreover, prepare one pair of engaged portions which engage with the engagement section in another side, respectively, and fixed scrolling is positioned in bearing housing by engagement to these engagement section and an engaged portion. By having arranged each of one pair of engagement sections, and engaged portions in the location which shifted to the same side from the base plane passing through the bearing housing or center line top of fixed scrolling Even if fixed scrolling tends to be attached in the state of the reversal which made the mistake in receiving bearing housing and carried out 180-degree relative revolution Engagement to the engagement section and engaged portion can be performed as it is impossible, therefore incorrect assembly of fixed scrolling can be prevented certainly, as a result improvement in the dependability of a scrolling compressor etc. can be aimed at.

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**DESCRIPTION OF DRAWINGS**

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**[Brief Description of the Drawings]**

[Drawing 1] It is the amplification side elevation of fixed scrolling seen from the main bearing housing side.

[Drawing 2] It is the amplification side elevation of main bearing housing seen from the fixed scrolling side.

[Drawing 3] It is the sectional view showing the whole high voltage dome mold horizontal scrolling compressor configuration concerning the operation gestalt of this invention.

[Drawing 4] It is the left side view showing the condition of having removed the left-hand side covering device in casing of a scrolling compressor.

**[Description of Notations]**

(A) High voltage dome mold horizontal scrolling compressor

(1) Casing

(3) Scrolling compressor style

(7) Drive motor

(8) Crankshaft

(10) Fixed scrolling

(11) Movable scrolling

(10a) (11a) End plate

(10b) (11b) Eddy rolled object

(10h) (12e) Contact side

(12) Main bearing housing (bearing housing)

(16) Compression space

(60) Gage pin (engagement section)

(61) Pin hole (engaged portion)

(H) Base plane

(L) Offset dimension

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[Translation done.]

**\* NOTICES \***

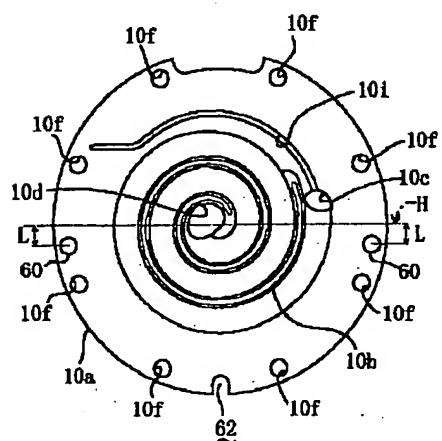
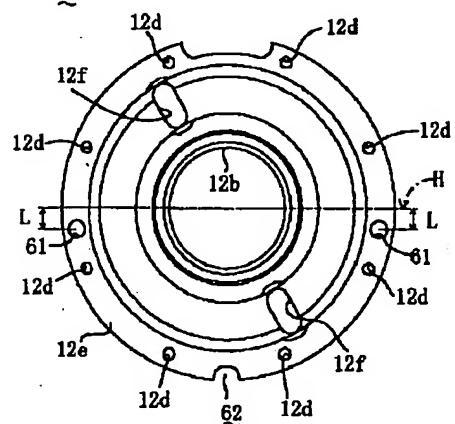
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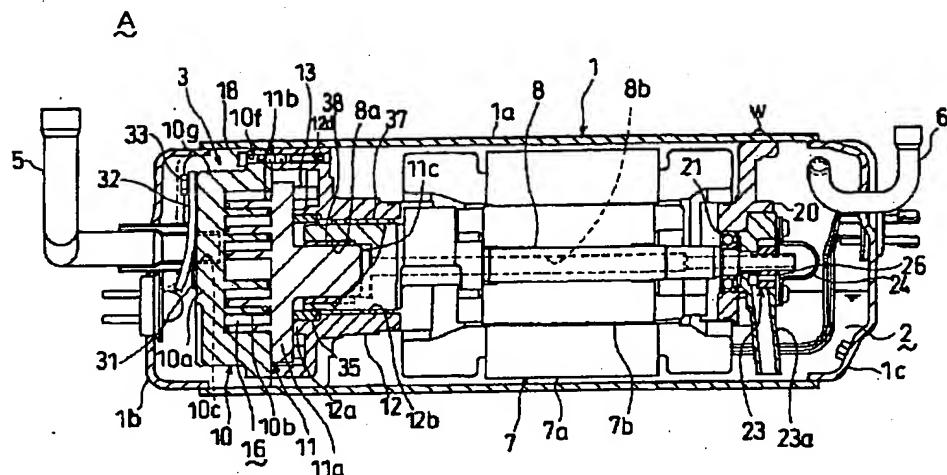
1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

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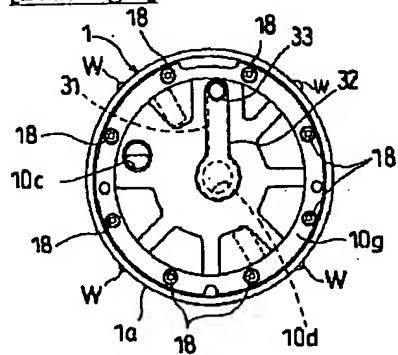
**DRAWINGS**

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**[Drawing 1]**10**[Drawing 2]**12**[Drawing 3]**



[Drawing 4]




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[Translation done.]